

# **SUS: UNDERSTANDING OF THE IMAGES – VISUAL UNDERSTANDING IN THE CONTEXT OF THE HIERARCHICAL KNOWLEDGE OF THE CATEGORIES OF OBJECTS**

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## **Abstract**

One aspect of understanding of image is to interpret the image in terms of the real world object. This approach is represented by researchers in image understanding. Another aspect of understanding is to interpret the object extracted from the image in the context of the knowledge of the object categories that is previously learned. The second approach, presented in this paper, is connected with thinking process that applies the knowledge during solving of the visual problems. This approach, developed in the framework of the shape understanding method, is called visual understanding. Visual understanding is the process that makes it possible, among others, naming and recognition known objects, performing the visual diagnoses, solving visual problems or solving the visual intelligence tests. Visual understanding involves transformation of the sensory data into an image, extracting of the phantom from an image; performing the visual reasoning in order to obtain the symbolic name, performing the visual inference based on visual categories, and performing the imagery transformation during solving of the visual problems.

Keywords: shape understanding, a visual reasoning expert, a visual inference